



Amendment

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of claims

Please amend the claims as follows:

Please cancel claims 67-165 and add the following claims:

166. A method to identify an immunogenic peptide consisting of about 8-11 amino acid residues that induces a cytotoxic T cell response restricted by at least three alleles selected from the group consisting of B0701, B1401, B3501, B3503, B5101, B5301, B5401, Cw0602 and Cw0601 which method comprises
- providing an amino acid sequence of an antigen of interest;
 - locating within said sequence a subsequence of 8-11 amino acid residues which sequence comprises a first anchor residue at position 2 of said subsequence which is P, and a second anchor residue at the carboxy terminus of said subsequence selected from the group consisting of V, I, L, F, M, W, Y and A;
 - preparing one or more fragments of said antigen of interest that consist essentially of said located subsequence;
 - testing *in vitro* a first complex of said one or more fragments and a first HLA molecule selected from the group set forth above for recognition by cytotoxic T cells to induce a cytotoxic T cell response; and
 - testing *in vitro* at least a second complex of said fragment tested in (d) with at least a second HLA molecule different from the HLA molecule used in (d) and selected from the group set forth above for recognition by cytotoxic T cells so as to induce a cytotoxic T cell response; and
 - testing *in vitro* at least a third complex of said fragment tested in (d) and (e) with at least a third HLA molecule different from the HLA molecules used in (d) and (e) and selected from the group set forth above for recognition by cytotoxic T cells so as to induce a cytotoxic T cell response; and



selecting at least one fragment which elicits a cytotoxic T cell response in all of

(d), (e) and (f).

~~167.~~ The method of claim 166 wherein said second anchor residue is selected from the group consisting of V, I, F, M, W, Y, and A.

168. The method of claim 166 or 167 wherein said antigen of interest is HER2/neu; p53; a MAGE antigen; a prostate antigen; and HPV antigen; an HIV antigen; an HBV antigen; and HCB antigen; or a malaria antigen.

cont 169. The method of claim 168 wherein the antigen is a p53 antigen.

E 170. The method of claim 169 wherein said fragment is APAPAPSWPL.

171. A method to identify an immunogenic peptide consisting of about 8-11 amino acid residues that induces a cytotoxic T cell response restricted by at least three alleles selected from the group consisting of B0701, B1401, B3501, B3503, B5101, B5301, B5401, Cw0602 and Cw0601 which method comprises

- a) providing an amino acid sequence of an antigen of interest;
- b) locating within said sequence a subsequence of 8-11 amino acid residues which sequence comprises a first anchor residue at position 2 of said subsequence which is P, and a second anchor residue at the carboxy terminus of said subsequence selected from the group consisting of V, I, L, F, M, W, Y and A;
- c) preparing one or more fragments of said antigen of interest that consist essentially of said located subsequence;
- d) testing *in vitro* the ability of said one or more fragments to bind to a first HLA molecule selected from the group set forth above with an IC₅₀ less than 500nM ; and

e) testing *in vitro* the ability of said fragment tested in (d) to bind at least a second HLA molecule different from the HLA molecule used in (d) and selected from the group set forth above with an IC_{50} of less than 500nM; and

f) testing *in vitro* the ability of said fragment tested in (d) and (e) to bind at least a third HLA molecule different from the HLA molecules used in (d) and (e) and selected from the groups set forth above with an IC_{50} of less than 500nM; and

g) selecting at least one fragment which binds with an IC_{50} less than 500nM in all of (d), (e) and (f).

172. The method of claim 171 wherein said second anchor residue is selected from the group consisting of V, I, F, M, W, Y, and A.

173. The method of claim 171 or 172 wherein said antigen of interest is HER2/neu; p53; a MAGE antigen; a prostate antigen; and HPV antigen; an HIV antigen; an HBV antigen; and HCB antigen; or a malaria antigen.

174. The method of claim 173 wherein the antigen is a p53 antigen.

175. The method of claim 174 wherein said fragment is APAPPSWPL--